

ENVIRONMENTAL QUALITY COMMISSION

EQC Public Meeting
August 28, 2000
Park Mammoth Resort
Park City, Kentucky

The Kentucky Environmental Quality Commission (EQC) held a meeting on August 28, 2000 at the Park Mammoth Resort located at Park City, Kentucky. Commissioners present were Chair Aloma Dew, Vice-Chair Betsy Bennett, Bob Riddle, Gary Revlett, C. V. Bennett, and Serena Williams. EQC staff present was Leslie Cole, Erik Siegel, and Frances Kirchhoff. There were approximately 10 people in attendance.

EQC Chair, Aloma Dew called the meeting to order by introducing Hank Wiseman with the Kentucky Department of Air Quality. Mr. Wiseman gave a summary of proposed air quality regulations:

401 KAR 50:071

Repeal of 401 KAR 50:030, 401 KAR 50:0331, 401 KAR 50:032, 401 KAR 50:033, 401 KAR 50:034, 401 KAR 50:035, and 401 KAR 50:072.

401 KAR 52:001. Definitions and abbreviations of terms used in 401 KAR Chapter 52.

401 KAR 52:020. Title V permits.

401 KAR 52:030. Federally enforceable permits for non-major sources.

401 KAR 52:040. State-origin permits.

401 KAR 52:050. Permit application forms.

401 KAR 52:060. Acid rain permits.

401 KAR 52:070. Registration of designated sources.

401 KAR 52:080. Regulatory limit on potential to emit.

401 KAR 52:090. Prohibitory rule for hot-mix asphalt plants.

401 KAR 52:100. Requirements for public, affected state, and U.S. EPA review.

After discussion, Chair Dew called for a motion regarding the proposed air quality regulations. Commissioner C. V. Bennett made a motion to approve the regulations and Gary Revlett seconded the motion. The motion carried unanimously by voice vote.

The Commission was next briefed on the status of the cleanup of the Paducah Gaseous Diffusion Plant. The Commission invited Kentucky Division of Waste Management and U.S. Department of Energy (DOE) officials to review activities at the plant, which is considered one of the most polluted sites in the state.

Mike Welch with the Kentucky Division of Waste Management talked about the cleanup at the Paducah Gaseous Diffusion Plant and gave a slide presentation. Mr. Welch noted that the state is the lead agency

overseeing the cleanup of the site. There are 15 positions that have been created within the Division to oversee the cleanup of the plant. They have set a timeframe to have DOE clean up the site by the year 2010 and entered a federal facility agreement with DOE in 1998. However, monitoring will be ongoing at the site and contamination will remain for years to come. Efforts are underway to cleanup drum mountain and various scrap metal piles. Additional work is underway to address groundwater contamination. Mr. Welch noted that the state needs additional resources to ensure proper oversight at the site and will request additional federal funds.

Chair Dew next asked Mr. Don Seaborg, Paducah Gaseous Diffusion Plant Site Manager with the U.S. Department of Energy, to review efforts by DOE to cleanup the site.

Mr. Seaborg stated that DOE owns the land at the Paducah Gaseous Diffusion Plant and has the ultimate responsibility for cleaning up contamination. Bechtel Jacobs is the managing and integrating contractor, supervising work of subcontractors. United States Enrichment Corporation (USEC) leases the operating portion of the plant for uranium enrichment.

The U.S. Environmental Protection Agency and the Kentucky Department of Environmental Protection regulate the Paducah Gaseous Diffusion Plant. Mr. Seaborg gave a slide presentation and discussed cleanup progress to date. This included initiatives implemented to continually improve performance, planned work for 2000 and 2001, and funding.

Included in the presentation was the status of Drum Mountain--a pile of empty contaminated drums that once contained Uranium Tetrafluoride (UF₄). The pile contained about 6,500 metric tons of drums and was about 35 feet high. DOE started removing the drums in June 2000. To date, about 60 percent of the drums have been removed and placed into intermodals for shipping to a licensed disposal site in Utah.

Mr. Seaborg next talked about the technologies used in cleaning up Trichloroethylene (TCE). TCE has contaminated the groundwater under the plant. One technology is the lasagna process, called this because of its use of layered treatment zones. This technology was developed specifically for use in Paducah and was put into operation in December 1999. It uses electric currents to move groundwater contaminated with TCE to treatment zones where TCE is destroyed. It will take about two years to clean up a one-acre site. Tests will be conducted in the next few months to determine how effective the process has been so far.

This year DOE will also complete the removal of rubble piles and debris in the West Kentucky Wildlife Management Area. DOE will actively seek comment from the public regarding the projects. A public meeting was held in July to introduce the Feasibility Study on groundwater Operable Unit and will take comments through October 12. DOE also asked the Site-Specific Advisory Board (SSAB) for their input into whether DOE should conduct a Feasibility Study on the possibility of building a hazardous waste disposal facility on site. DOE has asked the SSAB to provide comments on an engineering evaluation/cost analysis on the plans to dispose of the scrap metal on site. The plan will go out for public comment in early September.

According to Mr. Seaborg, DOE is making strides to improve public communications by involving a Core Team, adding management coordination, providing greater management visibility, involving elected officials, increasing stakeholder communications, and improving information access.

DOE is also conducting excavations on behalf of the U.S. Department of Justice (and other agencies) looking into allegations regarding improper burial of waste at the site and past operations at the plant.

Work planned to begin in the next fiscal year (the federal fiscal new year begins in October) will include

- the decommissioning of one of the site's old facilities, the C-410 building;
- excavating contaminated soils along the length of the plant's old major drainage ditch; and
- moving forward with plans to build a conversion facility to help get rid of more than 37,000 cylinders of depleted uranium stored on site. A "Request for Proposal" will go out in October.

Another new technology called Permeable Treatment Zones is being tested to address groundwater contamination. With this technology, holes are drilled into which high-pressured water is injected creating a "fracture" in the soil. Into the fracture is injected iron filings. The iron filings create about a three-inch wide treatment zone through which contaminated groundwater will flow. When TCE comes into contact with the iron, it gives up an electron that breaks down the substance into harmless components. The Permeable Treatment Zone might be used as part of the overall plan to remediate groundwater at the site.

Beginning next fiscal year, DOE will initiate the removal of the remainder of the scrap piles at the plant. The scrapyards contain about 65,000 metric tons of material. The first draft plan for this removal is being reviewed by the U.S. EPA, the Kentucky Division of Waste Management, and the Kentucky Cabinet for Health Services' Radiological Health and Toxic Substance Branch. Public comment on the plan will begin next month.

In the next fiscal year, DOE will remove contaminants along the plant's former north-south diversion ditch. This ditch is contaminated with metals, hazardous chemicals, and radionuclides. In the early to mid 90s, DOE undertook a series of steps to lessen the amount of contaminants that might leave the site. A rerouting of the ditch was done around the worst contamination. DOE also did other rerouting of the ditch and installed traps and water treatment systems to keep contaminants on site. Next year's project calls for excavating the contaminated soils.

Paducah Gaseous Diffusion Plant is home to more than 37,000 cylinders storing depleted uranium hexafluoride. DOE is planning to build a conversion facility to help get rid of these cylinders. DOE will issue a request for proposals in mid-October in order to obtain ideas from industry. When the facility is built its cost and the length of time to remove the cylinders will depend on the proposals received and funding from Congress.

One of the most pressing problems is the DOE Material Storage Areas (DMSA). These were created

beginning with the transfer of the plant from government control to the United States Enrichment Corporation (USEC), and range in size from very small to large--most are indoors, but a few are outside. Today, DOE has 159 of these DMSAs. They store a variety of materials and some are believed to contain potentially fissile material. Characterizing and removing the DMSAs is a priority. It will cost about \$120 million and take three years to complete. (Because the estimate came too late, this figure is not in the Fiscal Year 2000 budget.)

Next year DOE will test two more cleanup technologies for groundwater; the 6-Phase Heating and the C-Sparge. The 6-Phase Heating uses electrodes to heat the ground to the point where TCE vaporizes. The vapor extraction wells capture the gases for treatment and the TCE is removed. This technology has been used beneath operating structures such as the Paducah Gaseous Diffusion Plant and has removed 99 percent of the TCEs in treated area. The purpose of this test is to determine if the technology works as deep under the surface as the target area. The C-Sparge technology has proven to be effective in other places. Ozone is injected into the subsurface from two points in each treatment well. The injections are in pulses that creates a re-circulating treatment zone. When ozone contacts TCE, it instantly breaks down the material. A resin canister placed inside the treatment well will trap Technetium-99. If this test proves C-Sparge will work in Western Kentucky's soil, multiple wells could be constructed to treat the full extent of the groundwater contamination plumes, or high concentration zones of the plumes.

DOE funding for cleanup programs this fiscal year is about \$77 million. About \$16 million of that goes to Nuclear Energy programs such as cylinder yard maintenance and the rest goes to Environmental Management programs. For next year, DOE anticipates funding to be more than \$90 million. If the dollars for the depleted uranium conversion facility planning and additional health studies is funded by Congress, the budget for the next year will be about \$108 million. Long-term funding is difficult to predict. Mr. Seaborg closed by stating the DOE is committed to cleaning up the Paducah Gaseous Diffusion Plant. The work will be done safely--for the workers, the community and the environment. The work will be done within or under budget. The work will be done on time or sooner. The work will be high quality.

Tuss Taylor, who heads up the Ky. Division of Waste Management's oversight of the Paducah Gaseous Diffusion Plant, was next to speak. Mr. Taylor talked about what he considered to be the most significant environmental problem at the plant, groundwater contamination. Mr. Taylor handed out maps on the

- Groundwater Operative Units baseline planning assumptions,
- Surface Operative Units water baseline planning assumptions, and
- Burial Grounds Operative Units baseline planning assumptions.

He reviewed the maps and various activities underway at the plant.

A question and answer session followed the presentations. Mike Welch commented that the Paducah Gaseous Diffusion Plant is a very serious health issue. It was agreed that the Commission would

continue to follow this issue, and possibly ask the Agency for Toxic Substances Disease Registry (who is conducting a health evaluation in the area) to come and make a presentation to the Commission on the subject.

Next, Chair Dew introduced John Shipp of the Tennessee Valley Authority (TVA). Mr. Shipp made a presentation concerning the sale of TVA's mineral rights. Mr. Shipp began with general information and a history of TVA. TVA operates 54 dams, 29 of which produce electricity; eleven are coal-fired plants and three are nuclear plants. TVA owns 40,220 acres of mineral rights in Eastern Kentucky known as the Redbird District of the Daniel Boone National Forest (DBNF). About 2 percent of the holdings are in Bell County, 62.2 percent is in Clay County, 1.4 percent is in Harlan County, and 34.6 percent is in Leslie County. Three percent of the surface area above the minerals is privately owned and the remainder located in the Daniel Boone National Forest.

In 1961 TVA used the revenues from the power plant to purchase the mineral rights to insure a reliable supply of coal. This source is no longer needed, according to Mr. Shipp. TVA is mandated to sell its minerals under the National Environmental Policy Act (NEPA). An environmental assessment is being conducted to determine if the sale will pose any significant impacts. Once the environmental assessment is completed, TVA will determine if an environmental impact statement is also needed.

After discussion of the TVA proposal to auction its mineral rights in Eastern Kentucky, Chair Dew read a draft recommendation regarding this issue for EQC consideration. The proposal stated that EQC joins with others in calling for TVA to prepare an Environmental Impact Statement as required under the NEPA to fully assess these impacts. The proposal further calls upon Governor Patton and Kentucky's Congressional delegation to fully pursue the option of transferring the minerals located under the DBNF from TVA to the U.S. Forest Service in order to preserve the biological diversity and integrity of Kentucky's only national forest from the impacts of coal mining. Betsy Bennett made a motion to adopt this proposal and Serena Williams seconded it.

After a discussion of the recommendation, it was amended by C.V. Bennett to include a statement that the state fully consider purchasing the TVA minerals in order to protect the Daniel Boone National Forest. Betsy Bennett seconded the amendment and the motion passed unanimously. A copy of the amended recommendation is attached and made a part of these minutes.

The transfer of the Land Between the Lakes (LBL) from TVA to the U.S. Forest Service was next reviewed. Ms. Ann Wright, Senior Advisor of River System Operations at TVA, and former manager of LBL, gave a status report on the transfer. Ms. Wright noted that LBL is a national recreation area. It has been operated by TVA and funded by federal appropriations and TVA funds. However, fiscal challenges to operate the area led TVA to look at ways to make the area more self-sufficient. TVA went to the public with several proposals to make the area more self sufficient including adding an amusement resort and condominiums. The public responded with a loud no.

Last year, Congress transferred management of LBL to the U.S. Forest Service (USFS) under the LBL

Protection Act. On October 1, 1999 transfer from TVA to USFS began. The USFS has created a transition team and is replacing all signs at LBL. The team is also conducting an inventory of real estate and personnel property and is working to transfer all records. A trust fund of one million dollars a year for first 5 years will be used for environmental education. TVA employed 91 employees at LBL. TVA employees were offered various options regarding their jobs. Seventy-four of the 91 employees retired or took a buy-out, 11 transferred to the USFS, and 6 took other TVA jobs. TVA hopes that the transfer will be complete by September 30, 2000. The USFS plans to develop a new forest resource plan for LBL. In the meantime, the USFS suspended all timber sales plans effective Oct. 1, 1999 through Oct. 1, 2000. The plan to resume timber sales after Oct. 1, 2000 under the existing forest management plan.

Questions and answers followed Ms. Wright's discussion. Ms. Dew thanked Ms. Wright for her update and the other speakers for attending the meeting.

Under the other business portion of the meeting, Executive Director, Leslie Cole gave the Commissioners a budget report. A draft agenda was given to the Commissioners for the upcoming Northern Kentucky public forum scheduled for Sept. 26 at the Northern Kentucky University. Ms. Cole noted that the EQC's annual working retreat is October 19 and 20 at Lake Cumberland Resort Park. Ms. Cole also disseminated a copy Secretary Bickford's plan for briefing Governor Patton on the mandatory garbage proposal.

There being no further business, the meeting adjourned at 9:30 p.m. Central Time.

Signed

Date

attachment